

CLAIMS

What is claimed is:

- 1 1. A method comprising:
 - 2 (a) generating a key hash result partially based on a global identifier of a
 - 3 source and an estimated current time at the source;
 - 4 (b) producing a first time-varying item based on the key hash result; and
 - 5 (c) presenting the first time-varying item for comparison with a second
 - 6 time-varying item being presented at the source.
- 1 2. The method of claim 1, wherein the presenting of the first time-varying
- 2 item is contemporaneous with presentation of the second time-varying item if the
- 3 global identifier of the source is accurately received and the current time at the source
- 4 has been accurately estimated.
- 1 3. The method of claim 1 further comprising:
 - 2 (d) repeating (a), (b) and (c) for each subsequent presentation of a newly
 - 3 produced first time-varying item and comparison of the newly produced first time-
 - 4 varying item with a newly produced and presented second time-varying item.
- 1 4. The method of claim 3, wherein prior to generating the key hash result,
- 2 the method further comprises:
 - 3 receiving a verification packet from the source, the verification packet including
 - 4 the global identifier of the source and a local time value at which the verification packet
 - 5 was formed at the source.
- 1 5. The method of claim 4, wherein the verification packet further includes
- 2 a table inclusive of items displayed as the first time-varying item and the second time-
- 3 varying item.
- 1 6. The method of claim 4, wherein the verification packet further includes
- 2 a data field to contain information to be transferred.

1 7. The method of claim 6, wherein the information includes a lookup table
2 for selection of the item to be presented.

1 8. The method of claim 4, wherein the verification packet further includes
2 a digital signature of contents of the verification packet.

1 9. The method of claim 4, wherein the generating of the key hash result
2 further comprises
3 computing a clock skew by recording a receipt time upon which the verification
4 packet is received and computing a time difference between the receipt time and the
5 local time value;
6 computing the estimated current time at the source corresponding to a current
7 time at a destination based on the clock skew; and
8 performing a cryptographic hash operation on a combination of at least the
9 global identifier and the estimated current time.

1 10. The method of claim 9, wherein the producing of the first time-varying
2 item includes accessing an entry of a lookup table using the key hash result and
3 recovering contents of the entry as the first time-varying item.

1 11. The method of claim 9, wherein the presenting of the first time-varying
2 item further comprises displaying the first time-varying item contemporaneously with a
3 display of the second time-varying item for visual comparison.

1 12. The method of claim 9, wherein the presenting of the first time-varying
2 item further comprises contemporaneous play back of audible sounds associated with
3 both the first and second time-varying items for auditory comparison.

1 13. A software stored in platform readable medium executed by internal
2 circuitry within a computing unit, the software comprising:
3 (a) a first software module to generate a key hash result based on at least a
4 global identifier of a source and an estimated current time at the source;

5 (b) a second software module to produce a first time-varying item based on
6 the key hash result; and

7 (c) a third software module to present the first time-varying item for
8 comparison with a second time-varying item presented at the source.

1 14. The software of claim 13, wherein the first, second and third software
2 modules repeatedly generate a new key hash result, produce a new first time-varying
3 item and present the new first time-varying item for each subsequent presentation of a
4 newly produced first time-varying item and compare the newly produced first time-
5 varying item with a newly produced and presented second time-varying item.

1 15. The software of claim 13 further comprising:
2 a fourth software module to receive a verification packet from the source, the
3 verification packet including the global identifier of the source and a local time value at
4 which the verification packet was formed at the source.

1 16. The software of claim 14, wherein the first software module generates
2 the key hash result through computation of a clock skew by recording a receipt time
3 upon which the verification packet is received and computing a time difference
4 between the receipt time and the local time value, computation of the estimated current
5 time at the source corresponding to a current time at a destination using the clock skew,
6 and performance of a cryptographic hash operation on a combination of at least the
7 global identifier and the estimated current time.

1 17. The software of claim 16, wherein the second software module produces
2 the first time-varying item by accessing an entry of a lookup table using the key hash
3 result and recovering contents of the entry as the first time-varying item.

1 18. The method of claim 16, wherein the third software module presents the
2 first time-varying item by displaying the first time-varying item for visual comparison
3 with a display of the second time-varying item intended to be contemporaneous with
4 the display of the first time-varying item.

1 19. A computing unit comprising:

2 a casing;
3 an input/output (I/O) interface;
4 a device that provides sensory data for a user, the device being integrated into
5 the casing; and
6 internal circuitry contained within the casing and controlling information
7 presented by the device, the internal circuitry to generate a key hash result based on a
8 global identifier of a source and an estimated current time at the source.

1 20. The computing unit of claim 19, wherein the internal circuitry is a
2 memory and a processor accessing information from the memory.

1 21. The computing unit of claim 19, wherein the I/O interface is an antenna
2 to receive signals from the source and provide the signals to the internal circuitry for
3 processing.

1 22. The computing unit of claim 19, wherein the I/O interface to receive a
2 verification packet including at least the global identifier and a local time value at
3 which the verification packet was formed prior to transmission to the computing unit.

1 23. The computing unit of claim 22, wherein the internal circuitry generates
2 the key hash result based on the global identifier, the estimated current time at the
3 source and data contained in a data field of the verification packet.

1 24. The computing unit of claim 19, wherein device is a display screen that
2 displays the information being time-varying images.

1 25. The computing unit of claim 23, wherein device is at least one speaker
2 that playback audible sounds which vary in time based on a value of the key hash
3 result.

1 26. The computing unit of claim 23, wherein device is at least a tactile
2 device that produces Braille patterns which vary in time based on a value of the key
3 hash result.

- 1 27. A network comprising:
2 a first computing unit to (i) transmit successive verification packets each
3 including a static global identifier and a varying local time value realized at the first
4 computing unit during formation of that verification packet, (ii) generate successive
5 first time-varying items based on contents provided within their corresponding
6 verification packet, and (iii) present the first time-varying items in successive fashion;
7 and
8 a second computing unit to (i) receive each verification packet, (ii) compute a
9 clock skew to determine a time difference between the first computing unit and the
10 second computing unit in response to receipt of a first verification packet, (iii) generate
11 successive second time-varying items based on contents provided by their
12 corresponding verification packet, and (iv) present the second time-varying items for
13 comparison with the first time-varying items.
- 1 28. The network of claim 27, wherein the first computing unit
2 communicates with the second computing unit over a wireless link.
- 1 29. The network of claim 27, wherein verification that the second
2 computing unit has received the global identifier of the first computing unit when the
3 second time-varying items are presented and changed contemporaneously with the first
4 time-varying items.